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FCC Warning

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Industry Canada

This Class A digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Safety Certifications

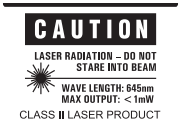
UL, CUL, TÜV, NOM

EN 55022 Warning

This is a Class A product. In a domestic environment it may cause radio interference, in which case the user may be required to take adequate measures. The typical use is in a conference room, meeting room or auditorium.

Remote Control Warning

Laser radiation class II product; wavelength 645nm; maximum output 1mW. Remote control complies with applicable requirements of 21 CFR 1040.10 and 1040.11. Remote control complies with applicable requirements of EN 60 825-1: 1994 +A11.



Declaration of Conformity

Manufacturer: InFocus
27700B SW Parkway Ave. Wilsonville, Oregon 97070 USA
European Office: Olympia 1, NL-1213 NS Hilversum, The Netherlands

We declare under our sole responsibility that the LP770 LCD projector conforms to the following directives and norms:

Directive 89/336/EEC, Amended by 93/68/EEC
EMI: EN 55022 (1998) Class A
EMC: EN 50082-1 (1992)
Directive 73/23/EEC, Amended by 93/68/EEC
Safety: EN 60950: 1992 + A1 + A2 + A3 + A4

October, 1999

Australian Certification C-tick mark

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SAFETY INSTRUCTIONS

Please read and follow all safety instructions provided BEFORE using your new projector. Failure to comply with safety instructions may result in fire, electrical shock, or personal injury and may damage or impair protection provided by equipment. Please save all safety instructions.

Safety Definitions:

- **Warning:** Statements identify conditions or practices that could result in personal injury.
- **Caution:** Statements identify conditions or practices that could result in damage to your equipment.

Safety Symbols:

Attention: For information about usage of a feature, please refer to the User's Guide.

Warning: Hot surface. Do not touch.

An arrow pointing to the lamp door on the projector.

Warning: Laser radiation. Do not stare into laser beam.

Safety Terms:

- **Warning:** Don't look directly into the lens when the lamp is turned on.

- **Warning:** To replace the lamp, turn the projector off by unplugging the power cord. To avoid burns, wait 60 minutes before opening the lamp door. Follow all instructions provided in this User's Guide.

- **Warning:** Please use the power cord provided. Connect the power cord to a receptacle with a protective safety (earth) ground terminal.

- **Warning:** Visible laser radiation. Do not stare into beam.

- **Warning:** Refer all service to qualified service personnel. Servicing your own projector will void the warranty. See below for the customer service contact information.
- **Caution:** Don't block ventilation openings.
- **Caution:** Don't set liquids on the projector. Spilled liquids may damage your projector.
- **Caution:** Don't place the projector on a hot surface or in direct sunlight.
- **Caution:** Do not drop the projector. Transport the projector in an InFocus-approved case.

Customer Service

If you need assistance, call InFocus Customer Service directly at **1-800-799-9911**. Support is free between 6 a.m. and 6 p.m. PST, Monday through Friday. Support is available in North America after hours and weekends for a fee at **1-888-592-6800.**

Or, send us an e-mail at techsupport@infocus.com

In Europe, call InFocus in The Netherlands at **(31) 35-6474010** between 8 a.m. and 6 p.m. Central European Time. Support is available in Europe after hours and on weekends for a fee at (**31) 35-6474001**.

In Asia, call InFocus in Singapore at **(65) 332-0659**.

INTRODUCTION

The InFocus® LP770™ multimedia projector combines powerful and sophisticated features with easy-to-use, intuitive controls. Built-in multimedia features include audio, a palette of 16.7 million colors and active matrix liquid crystal display (LCD) technology. It delivers crisp, clear XGA 1024x768 images. The LP770 is ideal for high-performance business, training and imaging applications that demand exceptional color quality.

Image Resolution

The XGA resolution of the LP770's projected image is 1024x768. The projector can compress screen resolutions of SXGA 1280x1024. If your computer's screen resolution is higher than 1280x1024, reset it to a lower resolution before you connect the projector**.**

NOTE: *The LP770 automatically expands 640x480 and 800x600 images to 1024x768. You can display these images at their native resolutions by pressing the Expand button on the remote. See page 18 for details.*

Compatibility

The projector is compatible with a wide variety of computers and video devices, including:

- IBM-compatible computers, including laptops, up to 1280x1024 resolution.
- Apple Macintosh and PowerBook computers up to 1280x1024 resolution.
- Most standard VCRs, DVD players, camcorders and laser disc players.

Unpacking the Projector

The projector comes with the items shown in Figure 1. Check to make sure all are included. **Contact your InFocus dealer immediately if anything is missing**.

If you are experienced in setting up presentation systems, use the *Quick Start* card that is included in the shipping box. For complete details on connecting and operating the projector, refer to this user's guide. User's guides are also available for download from our website at www.infocus.com.

NOTE: *The contents of your shipping box may vary depending on the projector configuration you've ordered.*

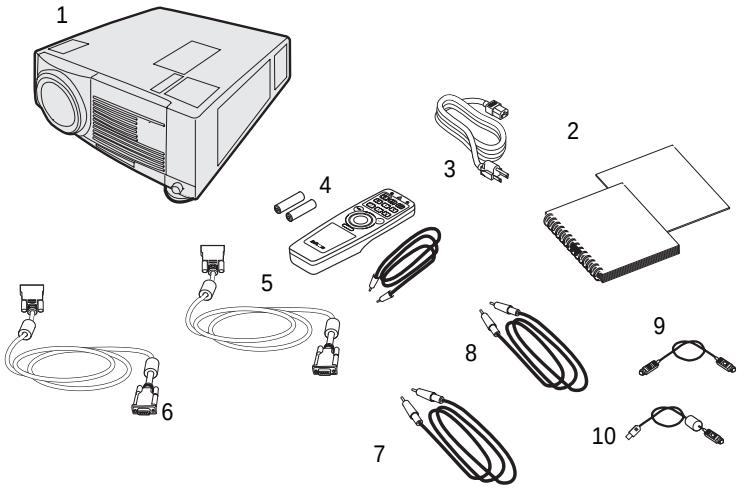

FIGURE 1

Shipping box contents

1. LP770 projector + lens cap
2. User's Guide and quick start card
3. Power cord
4. Remote control, batteries, and cable
5. VESA computer cable
6. RS-232 cable
7. Audio cable
8. Composite video cable
9. PS/2 mouse cable
10. USB mouse cable

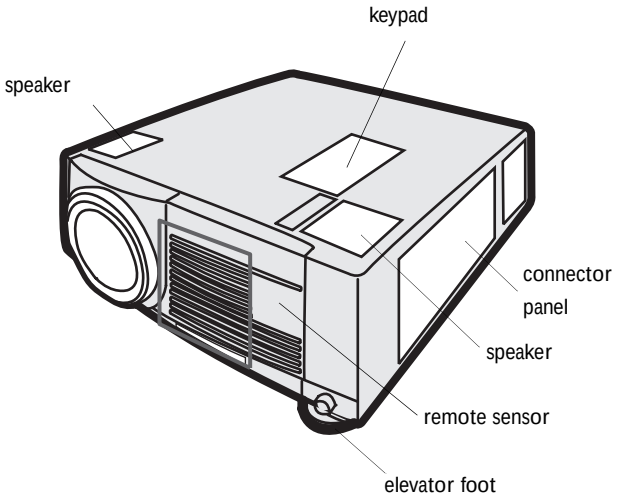

FIGURE 2

Projector overview

Usage Guidelines

- Do not look directly into the projection lens when the lamp is turned on. The bright light may harm your eyes.
- Do not block the grills on the projector. Restricting the air flow can cause it to overheat and turn off. If this happens, you must wait a minute before attempting to turn it back on.
- Handle the projector as you would any product with glass components. Be especially careful not to drop it.
- Avoid leaving the projector in direct sunlight or extreme cold for extended periods of time. If this happens, allow it to reach room temperature before use.
- Transport the projector in a vendor-approved hard or soft case. Part numbers for these cases are listed on page 41.

If You Need Assistance

The first place to look for help is in this manual. Be sure to check the guidelines in "Troubleshooting" on page 34. Or, check the Service and Support section of our website at **www.infocus.com/service.**

If those sources don't answer your question, call your InFocus dealer. You can also call InFocus Customer Service directly at **1-800-799-9911**. Call between 6 a.m. and 6 p.m. PST, Monday through Friday. Service is available in North America after hours and on weekends for a fee at **1-888-592-6800**.

In Europe, call InFocus in The Netherlands at **(31) 35-6474010** between 8 a.m. and 6 p.m. Central European Time. Support is available in Europe after hours and on weekends for a fee at (**31) 35-6474001**.

In Asia, call InFocus in Singapore at **(65) 332-0659**.

Or, send us an e-mail at **techsupport@infocus.com**

Our World Wide Web address is **www.infocus.com**.

Warranty

This product is backed by a limited two-year warranty. The details of the warranty are printed at the back of this manual. A longer term warranty can be purchased from your InFocus dealer. Refer to page 41 for the part number.

SETTING UP THE PROJECTOR

1 Place the projector on a flat surface.

- The projector must be within 10 feet (3 m) of your power source and within 6 feet (1.8 m) of your computer.
- If you want to project from behind a translucent screen, set up the projector behind your screen. See "Image Reverse" on page 24 to reverse the image.

2 Position the projector the desired distance from the screen.

- The distance from the lens of the projector to the screen and the zoom setting determine the size of the projected image. Figure 3 shows three projected image sizes. For more information about image size, see "Projected Image Size" on page 47.

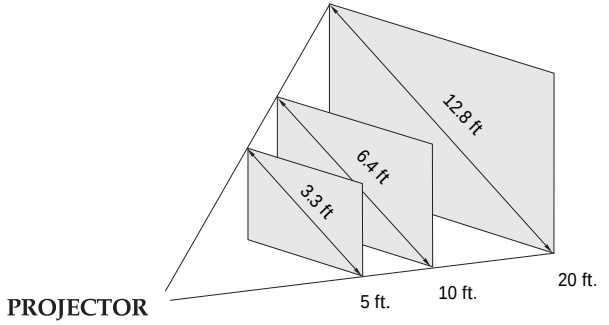

FIGURE 3

Projected image size at maximum zoom

3 Make sure the projector is unplugged and your computer is turned off.

***NOTE**: Before you continue, make sure the projector is unplugged and your equipment is turned off. If you're connecting a computer, make sure the distance between it and the projector is 6 feet or less.*

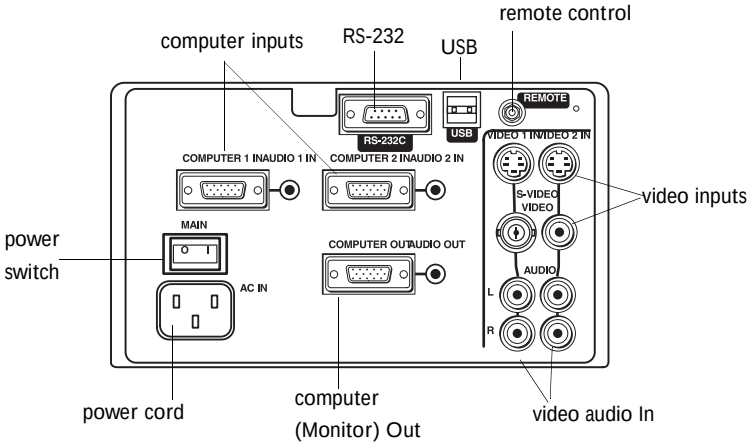

FIGURE 4

Connector panel

Connecting a Computer

1. (Desktop models only) Locate the cable that connects your monitor to your computer. Unplug it from the computer.
2. Plug one end of the VESA computer cable into the video connector on your computer.
3. Plug the other end of the VESA computer cable into the **Computer 1** or **2 In** connector on the projector.

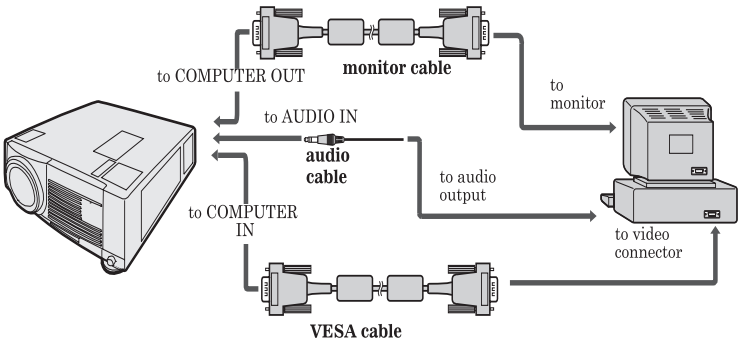

FIGURE 5

Connecting the projector to a computer

Do you want to display the image on your computer's monitor as well as on the projection screen?

1. Plug your monitor's cable into the **Computer Out** connector on the projector.

Do you want to play your computer's audio on the projector?

1. Plug either end of the audio cable into the audio connector on your computer.
2. Plug the other end of the audio cable into the **Audio 1** or **2 In** connector on the projector.

NOTE: *Many laptop computers do not automatically turn on their external video port when a secondary display device such as a projector is connected. Refer to your computer manual for the command that activates the external video port. Activation commands for some laptop computers are listed in the Appendix of this manual on page 42 and in the Service section of our website.*

NOTE*: The projector must be turned on to display the image on your monitor.*

NOTE: *If you are connecting an older Macintosh computer that does not have a VESA (15-pin) connector, you must use a Mac adaptor between the computer and the projector. See "Optional Accessories" on page 41.*

Do you want to control the computer's mouse from the projector's remote or keypad?
If your computer has a USB connector and is running Windows 98, use the USB mouse cable.

NOTE: *The USB mouse is supported for use with Windows 98 only.*

1. Plug the one end of the USB mouse cable into the mouse connector on your computer.
2. Plug the other end of the USB mouse cable into the USB connector on the projector.

You must have the appropriate USB drivers installed on your computer to use the USB feature. Windows 98 ships with the appropriate drivers.

NOTE: *See page 13 for details on using the remote to control your computer.*

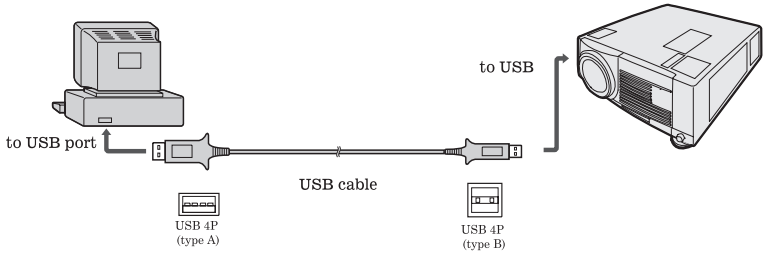

FIGURE 6

Connecting a mouse via the USB connector

If your computer has a PS/2 connector, use the PS/2 mouse adapter and the RS-232 cable.

1. Plug one end of the PS/2 mouse adapter into the mouse connector on your computer.
2. Plug the other end of the PS/2 mouse adapter into the RS-232 cable.
3. Plug the other end of the RS-232 cable into the RS-232 connector on the projector.

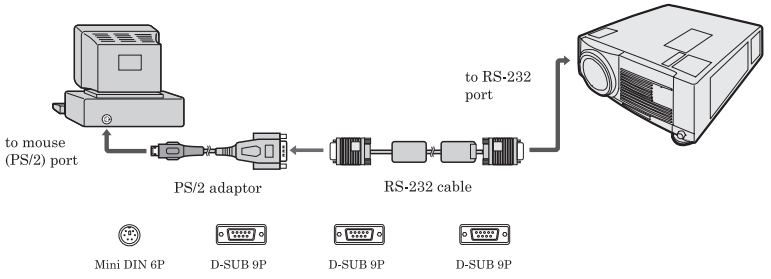

FIGURE 7

Connecting a mouse via the PS/2 connector

If your Macintosh computer has an ADB connector, use the ADB mouse adapter and the RS-232 cable.

1. Plug one end of the ADB mouse adapter into the mouse connector on your computer.
2. Plug the other end of the ADB mouse adapter into the RS-232 cable.
3. Plug the other end of the RS-232 cable into the RS-232 connector on the projector.

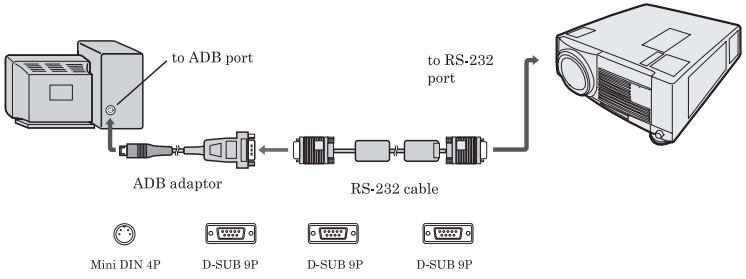

FIGURE 8

Connecting a mouse via the ADB connector

Now you're ready to power up the projector and your computer. Skip to "Powering up the Projector and Adjusting the Image" on page 11.

NOTE: *You do not need to restart your computer after connecting a USB mouse to use it (it is hot-plug-gable). You must restart your computer after plugging in a PS/2 or ADB mouse.*

Connecting a Video Player

The LP770 has 3 different connections for video players: S-video, composite video, and BNC (the S-video and BNC connections require cables not included with the LP770).

1. If your video player uses a round, one-prong composite video connector, plug the composite video cable's yellow connector into the "video-out" connector on your video player. This connector may be labeled "To Monitor." If you're using an S-video cable, connect it to the "S-video out" connector on the video player. If you're using a BNC cable, connect it to the "BNC-video out" connector on the video player (Figure 9).

CAUTION: *Your video player may also have a "Video Out" connector for a coaxial cable connection. DO NOT use this to connect to the projector.*

2. Plug the other yellow connector into the **Video 2 In** composite video connector on the projector. If you're using S-video, plug the other end of the cable into the **Video 1 or 2 In** "S-video" connector on the projector. If you're using BNC, plug the other end of the cable into the **Video 1 In** "BNC" connector on the projector.

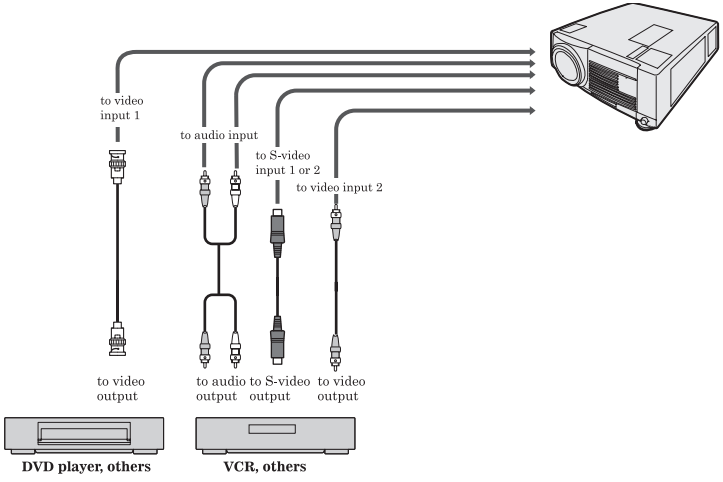

FIGURE 9

Connecting the projector to a video player

3. Plug the audio cable's white connector into the left "audio out" connector on your video player. Plug the cable's red connector into the right "audio out" connector on the video player.

4 Plug the audio cable's white connector into the Left Audio connector on the projector; plug the audio cable's red connector into the Right Audio connector on the projector.

The projector is compatible with these major broadcast video standards: NTSC, NTSC 4.43, PAL, PAL-M, PAL-N, and SECAM. It automatically adjusts to optimize its performance for the incoming video. See "Video Signal" on page 26 for details.

Connecting DVD players with component video output or HDTV decoders

If your DVD player has (Y,Cb,Cr) outputs, use the Computer 1 or Computer 2 In connectors. Also select (Y,Cb,Cr) for Computer Input in the Signal menu (see "Computer Input" on page 28).

If your HDTV decoder has (Y,Pb,Pr) outputs, use the Computer 1 or Computer 2 In connectors. Also select (Y,Pb,Pr) for Computer Input in the Signal menu.
If your HDTV decoder has R, G, B output, select RGB for Computer Input in the Signal menu.

Powering up the Projector and Adjusting the Image

1 Remove the lens cap.

2 Plug the power cord into the side of the projector, then plug it into the electrical outlet. A surge-protected power strip is recommended.

3 Press the power switch to put the projector in standby.

- The Power LED lights red.

4 Turn on the lamp by pressing the **Power** button on the remote or keypad (see Figure 12 on page 16).

- After a brief warmup period, the InFocus startup screen appears.

5 If you connected a video player, turn it on.

- The video image should display on the projection screen. If a computer source is active, press the **Video** button on the remote or keypad to display your video image.
- Use the **Volume +** or **-** buttons to adjust the volume.

***NOTE**: Always use the power cord that shipped with the projector.*

***NOTE**: After 2,000 hours of use, the lamp automatically shuts off and must be replaced. See "Replacing the Projection Lamp" on page 31 for details.*

***NOTE**: With some computers, the order in which you power up the equipment is very important. Most computers should be turned on last, after all other peripherals have been turned on. Refer to your computer's documentation to determine the correct order.*

6 Turn on your computer.

- The computer image should display on the projection screen. If a video source is active, press the **Computer** button on the remote or keypad to display your computer's image. Make sure your laptop's external video port is activated; see "Portable and Laptop Activation Chart" on page 42 for details.
- Adjust the focus by pressing the **Zoom/Focus** button on the remote or keypad and using the **+** or **-** buttons. Press the **Zoom/Focus** button again to zoom the image. See page 15 for details.
- If necessary, make adjustments to the image using the projector's on-screen menus. To open the menus, press the **Menu** button on the keypad or remote, then select the Picture or Option menus. For more information about the menus, see page 20.

***NOTE:** Do not turn the projector off until the Lamp LED has stopped blinking. This allows the lamp to cool properly and extends lamp life.*

Turning Off the Projector

If you want to turn off the projector, press the **Power** button on the keypad or remote. A message appears, asking for verification. Press **Power** again to turn the lamp off. (If you do not press **Power** again, the projector returns to normal operation.) The Lamp LED blinks green for about 1 minute while the fans run and the lamp cools. After a minute, the Lamp LED turns off and the projector is in standby mode. This means you can either press the **Power** button to turn the lamp back on, or use the Main power switch to turn the projector off.

You can set the projector to enter standby mode automatically after no signal is detected for a certain amount of time; see "Auto Power Off" on page 25 for details.

***NOTE:** If you accidentally use the Main power switch to turn the projector off while the lamp is on or still cooling, allow the projector to cool for 10 minutes before attempting to turn it back on.*

USING THE PROJECTOR

This section describes how to use and make adjustments to the projector. It also provides a reference to the keypad and remote buttons and the options available from the on-screen menus.

Basic Image Adjustment

1. Make sure you have powered up your equipment in the right order (page 11).
2. If the image doesn't display completely, adjust the height and tilt of the projector (page 15), zoom the image (page 15), or center the image by adjusting its horizontal or vertical position (page 27).
3. If the image is out of focus, use the **Zoom/Focus** button on the remote or keypad to focus it (page 15).
4. If the computer image appears to shimmer or if it has blurry vertical bars after you have adjusted the focus, press the **Auto Position** button on the remote or keypad (page 17). If the image still doesn't look right, adjust the fine sync (page 27) and / or the tracking (page 28) manually.
5. If the colors don't look right, adjust the brightness (page 21) and tint (page 22).

Using the Remote Control

Point the remote control at the projection screen or at the front or the rear of the projector. The range for optimum operation is about 25 feet. If you point the remote at the projection screen, the distance to the screen and back to the projector must be less than or equal to 25 feet. For best results, point the remote directly at the front or the rear of the projector.

The projector ships with a full-feature remote (see page 16 for a description of the buttons) which includes a laser pointer. The remote has a disk mouse and two mouse buttons, one on the top of the remote and one on the bottom (Figure 10).

NOTE: *If you can't aim the remote control at the projector so that its signal is received — for example, when using rear projection — use the remote control cable to connect the remote directly to the projector.*

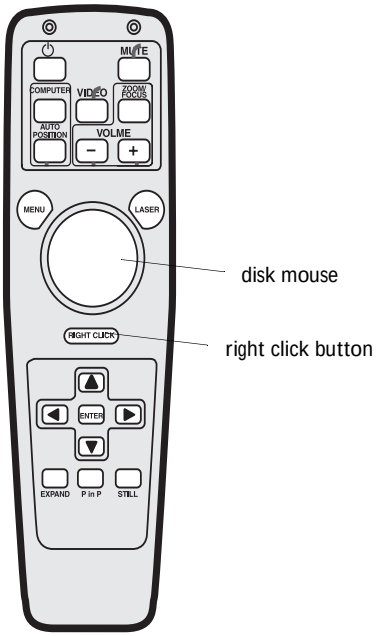

FIGURE 10

Remote control

NOTE: *To control the computer's mouse from the projector's remote or keypad, you must connect the mouse cable to the projector. See page 8 for details.*

Press anywhere on the edge of the disk mouse to move the cursor on the screen. You can move the cursor at any angle by pressing the corresponding edge of the disk. The mouse button on the top of the remote simulates your computer's right mouse button; the button on the bottom simulates your computer's left mouse button. When you press the disk mouse, the remote lights up. The light goes off 10 seconds after you stop pressing buttons.

To use the laser pointer, press and hold the laser button. The laser goes off when the button is released.

If you are creating presentations in Microsoft® PowerPoint®, you can use the remote's mouse buttons to navigate through your presentation while in Slide Show mode. To configure PowerPoint for this, choose Options from the Tools menu, click the View Tab, de-select the "Popup Menu on Right Mouse Click" option in the Slide Show section, then click OK. Then, when you're in PowerPoint's Slide Show mode, a left click advances to the next slide and a right click returns to the previous slide (other PowerPoint modes are not affected).

Adjusting the Projector

To focus the image, press the **Zoom/Focus** button on the remote or keypad. “Focus” appears on the screen. Press the adjacent “+” or “-” buttons until the image is clear. To zoom the image, press the **Zoom/Focus** button again. “Zoom” appears on the screen. Press the “+” or “-” buttons to adjust the size of the image. This adjusts the size without affecting focus.

The projector is equipped with self-locking, quick-release elevator feet and buttons (Figure 11).

To raise the projector:

1. Press and hold the elevator buttons (Figure 11).
2. Raise the projector to the height you want, then release the buttons to lock the elevator feet into position.
3. If necessary, rotate the feet to adjust the angle of the projected image.

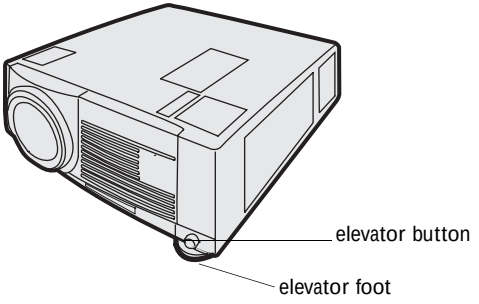

FIGURE 11

Adjusting the height of the projector

NOTE: *Focus and zoom adjustments are available while in normal mode only. They are not available in PinP or Expand modes.*

Using the Keypad and Remote Buttons

This section provides a reference to the keypad and remote buttons.

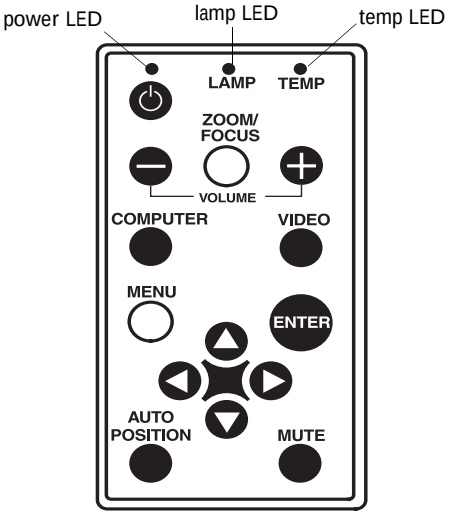

FIGURE 12

Keypad

FIGURE 13

Remote

Auto Position
Press this button to have the projector automatically re-adjust a computer image. It adjusts horizontal and vertical position, fine sync, and tracking.

Computer
When you have more than one source (computer 1 or 2 or video) connected to the projector, select between them by pressing the button for the source you want.

Press **Computer** to display your computer image. Press **Computer** again to toggle between computer 1 and computer 2.

Enter
Use this button to accept your selections in the menus.

Menu
Press **Menu** to open the on-screen menus. Press **Menu** again to close the menus. When you close the menus, the projector saves any changes you made. For more information about the on-screen menus, see page 20.

Mute
Pressing the **Mute** button silences the internal speakers and removes the projected image from the screen. To prevent damage to the projector, the projector automatically turns the audio and image back on after 10 minutes.

To restore the image and audio, press **Mute** again.

Power
The **Power** button turns the projector on and off. When you press the power switch, the projector enters standby mode and the Power LED lights red. When you press the **Power** button, the lamp lights and the Lamp and Power LEDs light green.

When you press the **Power** button again, the lamp goes out and the Power LED lights red. See page 12 for details on turning the projector on and off.

Video
When you have more than one source (computer 1 or 2 or video) connected to the projector, select between them by pressing the button for the source you want.

NOTE: *Some screen savers interfere with Auto Position. If you're experiencing problems, try turning your screen saver off.*

NOTE: *Mute does not affect external speakers.*

Press **Video** to display the image from your video player. Press **Video** again to toggle between video 1 and video 2.

Zoom/Focus

To focus the image, press the **Zoom/Focus** button on the remote or keypad. “Focus” appears on the screen. Press the adjacent “+” or “-” buttons until the image is clear. To zoom the image, press the **Zoom/Focus** button again. “Zoom” appears on the screen. Press the adjacent “+” or “-” buttons to adjust the size of the image. This adjusts the size without affecting focus.

Remote only buttons

Expand

This feature allows you to resize images and digitally zoom in on a part of a computer image. Press the Expand button. The image is expanded, if possible. Press the Expand button again, then press the + or - buttons to change the magnification of the area. You can use the arrow buttons to move to a specific area. Press the Expand button again to return to the normal view.

NOTE: For video images., Expand attempts to expand the image to fit the entire screen. Digital zoom is not available for video images.

Laser

The laser button activates a laser beam that can be used as a pointing device. To use the laser, press and hold the laser button. The laser goes off when the button is released.

P in P

Picture in Picture (PinP) allows you to view 2 different sources at the same time. The computer source is the main image, the video source is the sub-image. Press the PinP button. The sub-image appears. You can move the image using the arrow buttons or change its size using the + or - button. Use the **Video** button to change the video source displayed in the sub-image.

NOTE: You can select which audio source is outputted during PinP mode, see page 23.

Still

The **Still** button halts, or “freezes” the projected image. Use this button to freeze a frame of video (the video continues to run but the projected image is frozen). You can also freeze an image from a computer source on the screen, allowing you to perform other operations on the computer without the audience seeing them. Press **Still** again when you want the image to return to normal.

Volume + or -

- To increase the volume, press **+**. The volume control bar appears on the screen. The bar disappears 10 seconds after you release the volume buttons.
- To decrease the volume, press **-**.

Volume adjustments are saved for each source you have connected.

NOTE: *Volume adjustments are not available while the menus are displayed, and do not affect external speakers.*

Keypad LEDs

The keypad has 3 LED lights that indicate the current status of the projector. See Troubleshooting on page 34 for details on LED behavior.

- The Power LED lights red when the power switch is turned on and the projector is in standby mode. It lights green when the lamp is on.
- The Lamp LED lights green when the lamp is on. The LED blinks green while the lamp is cooling down.
- The Temperature LED lights red when the projector is overheating.

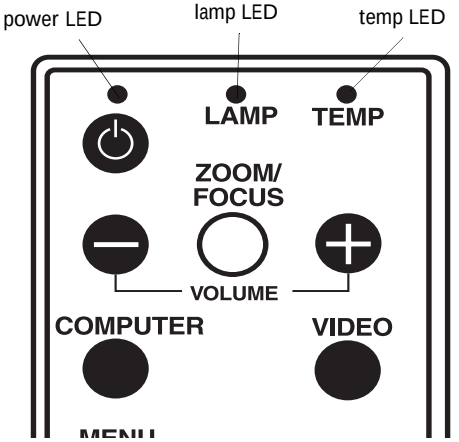

FIGURE 14

LEDs

Using the On-Screen Menus

The projector has five menus that allow you to make image adjustments and change a variety of settings. Most of these adjustments aren't available directly from the keypad or remote.

To open the on-screen menus, press the **Menu** button on the remote or keypad. Press **Menu** again when you want to close the menus and save any changes.

To select a menu, use the arrow keys on the keypad or remote to move the cursor left and right to highlight the menu you want, the press Enter. The menu appears.

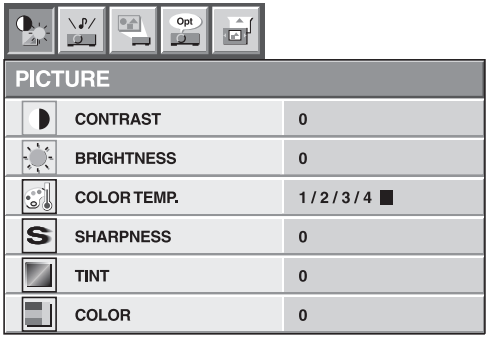

FIGURE 15

Menus

To change a menu setting, use the up and down arrow keys on the keypad or remote to move the cursor up and down to the item you want to change (the selected item is highlighted), then use the left and right arrow buttons to adjust a setting. If a square (■) appears next to an option, highlight the square then press the **Enter** button to access a submenu. To exit the submenu and return to the previous menu, press the **Menu** button. All changes are saved when you close the menus.

To access another menu, use the up arrow button to move the cursor to the top of the menu bar, move the cursor left or right to highlight the menu you want, then press the **Enter** button.

Picture Menu

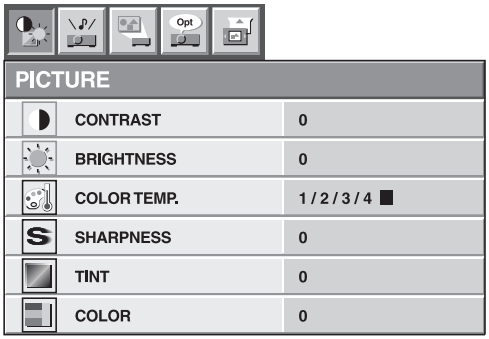

FIGURE 16

Picture menu

Contrast

The contrast controls the degree of difference between the lightest and darkest parts of the picture. Adjusting the contrast changes the amount of black and white in the image.

- Press the left arrow button to decrease the contrast.
- Press the right arrow button to increase the contrast, making the blacks appear blacker and the whites appear whiter.

Brightness

Adjusting the brightness changes the intensity of the image.

- Press the left arrow button to darken the image.
- Press the right arrow button to lighten the image.

Color Temperature

This setting adjusts the amount of red in the projected image.

- Select 1 for Standard color temperature, select 2 for High color temperature, or select 3 for Low color temperature.
- To adjust the contrast and brightness on the red and blue signals individually, highlight "4 ■" and press **Enter**. The Color Temperature sub-menu appears (Figure 17). Use the left and right arrows to make adjustments, then press the **Menu** button to return to the previous menu.

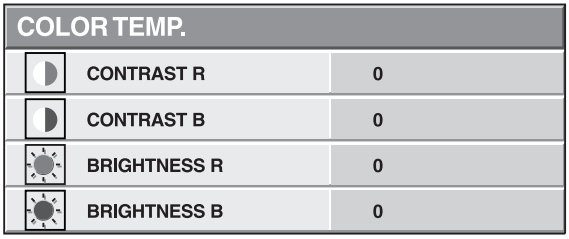

FIGURE 17

Color temperature sub-menu

Sharpness

The sharpness setting adjusts the edges of a computer image.

- Press the left arrow button to decrease the sharpness.
- Press the right arrow button to increase the sharpness.

Tint

The tint adjusts the red and green color balance in the projected image from a video source. It is not available for computer images.

- Press the left arrow button to increase the amount of green in the image.
- Press the right arrow button to increase the amount of red in the image.

Color

The color setting adjusts the color saturation of a video image. It is not available for computer images.

- Press the left arrow button to decrease the amount of color in the image. If desired, you can make the image black and white.
- Press the right arrow button to increase the amount of color in the image.

Audio Menu

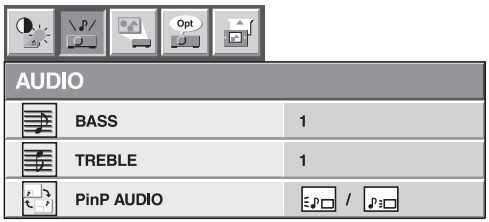

FIGURE 18

Audio menu

Bass

The bass setting controls the low frequencies of your audio source.

- Press the left arrow button to decrease the bass.
- Press the right arrow button to increase the bass.

Bass adjustments are saved for each source you have connected.

NOTE: *Bass and treble adjustments do not affect external speakers.*

Treble

The treble setting controls the high frequencies of your audio source.

- Press the left arrow button to decrease the treble.
- Press the right arrow button to increase the treble.

Treble adjustments are saved for each source you have connected.

PinP audio

This setting controls which source's audio is heard during Picture in Picture (PinP) mode. See "P in P" on page 18 for details on PinP.

- Press the left or right arrow buttons to select between playing the main screen's audio or the sub-image's audio.

NOTE: *During PinP mode, Expand is not available.*

Installation Menu

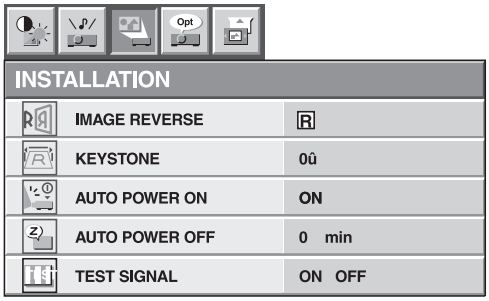

FIGURE 19

Installation menu

NOTE: *To order the LP770 Ceiling Mount, see "Optional Accessories" on page 41.*

Image Reverse

Use this option to change the projection for ceiling mounted or rear projection installations.

- Press the right arrow once to reverse the image so you can project from behind a translucent screen.
- Press the right arrow again to reverse and turn the image upside down for ceiling-mounted rear projection.
- Press the right arrow a third time turn the image upside down for ceiling-mounted projection.
- Press the left arrow button to cycle through the options and return to normal projection.

Keystone

Use this option if your image is wider at the top than at the bottom. It changes the angle of projection to yield a more rectangular image. The values range from -15 to 15°.

Auto Power On

This option allows you to automatically turn the lamp on when you turn the projector on (the Main power switch must be On). This is helpful in ceiling-mounted installations. When this feature is off, you must press the **Power** button to turn the lamp on.

Auto Power Off

This option lets you select how long the lamp stays on after no source is detected. After the specified time, the lamp goes out and the projector enters standby mode. Select 0 to cancel this function.

Test Signal

Turn this on to display a test signal. Remove the test signal by pressing the **Enter** button.

Option Menu

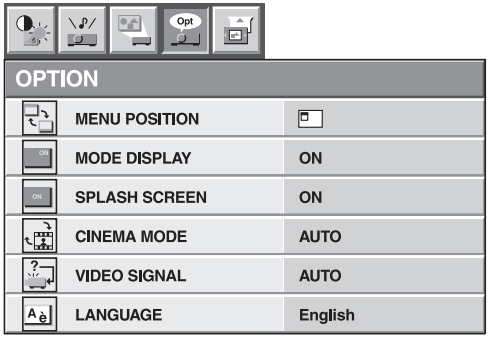

FIGURE 20

Option menu

Menu Position

This option lets you display the menus in either the upper left or lower right corner of the screen.

Mode Display

When this option is on, the name of the active source (for example, “Computer 1”) appears on the screen.

Splash Screen

When this option is on, the InFocus splash screen appears when the projector starts up. The screen contains information for contacting InFocus. If you turn this feature off, a blank screen is displayed.

NOTE: *Use this feature only when viewing movies. Images from other sources may be degraded.*

Cinema Mode

This option corrects line gaps and reduces the flicker in DVD and LaserDisk movie images using an S-video connection. Select Auto (for movie images) or Off.

Video Signal

When Video standard is set to Auto, the projector attempts to automatically select the video standard (NTSC, NTSC 4.43, PAL, PAL-M, PAL-N, PAL-60, or SECAM) based on the input signal it receives. (The video standard options may vary depending on your region of the world.) If the projector is unable to detect the correct standard or you are using PAL-M or PAL-N, the colors might not look right or the image might appear "torn." If this happens, manually select a standard using the arrow buttons.

Language

You can display the on-screen menus in English, French, German, Spanish, Italian, Chinese, and Japanese.

- Click the arrow button to cycle through the options. The menus redraw immediately.

Signal Menu

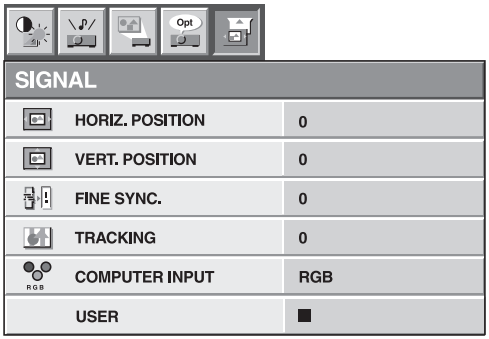

FIGURE 21

Signal menu

Horizontal Position

Highlight Horizontal Position, then press the left arrow button to move the image left or press the right arrow button to move the image right.

Positioning adjustments are saved when you power off the projector.

Vertical Position

Highlight Vertical Position, then press the left arrow button to move the image down or press the right arrow button to move the image up.

Positioning adjustments are saved when you power off the projector.

Fine Sync

The projector adjusts signal synchronization automatically for most computers. But if the projected computer image looks fuzzy or streaked, try adjusting the signal synchronization manually by highlighting Fine Sync, then pressing the either arrow button repeatedly until the image is sharp and free of streaks.

NOTE: *Some screen savers interfere with signal detection. If you're experiencing problems, try turning your screen saver off.*

*NOTE: The **Fine Sync**, **Tracking**, **Horiz. Position** and **Vert. Position** options are available only for computer sources. The projector sets these options automatically for a video source.*

Tracking

The projector adjusts tracking automatically to match the video signal from your computer. However, if the display shows evenly spaced, fuzzy, vertical lines or if the projected image is too wide or too narrow for the screen, try adjusting the tracking manually by highlighting Tracking, then pressing either arrow button repeatedly until the fuzzy vertical bars are gone.

Computer Input

The projector automatically adjusts itself when connected to either DVD players with component video output (YCbCr or YPbPr) or equipment with HDTV outputs. If your projector is connected to equipment outputting RGB HDTV, select RGB in this menu.

User

Highlight this menu, then press Enter. The User submenu appears. These settings should be adjusted only if there are problems with the image.

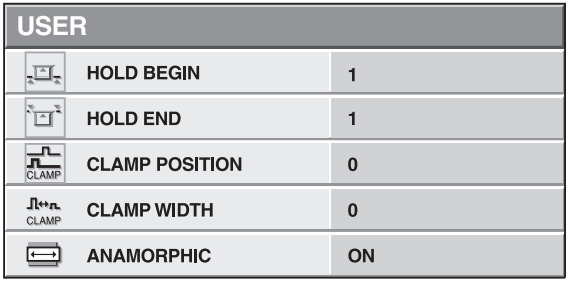

FIGURE 22

Signal menu

Hold Begin/Hold End

If the projected image is curved near the top of the screen, try adjusting the Hold Begin or Hold End settings by highlighting the option, then pressing either arrow button repeatedly.

Clamp Position/Clamp Width

If the projected colors are blurry, try adjusting the Clamp Position or Clamp Width settings.

Anamorphic

If you are playing a DVD and the image appears stretched vertically, try turning Anamorphic on.

MAINTENANCE & TROUBLESHOOTING

This section describes how to:

- clean the lens
- clean the air filters
- replace the projection lamp
- replace the batteries in the remote
- use the Kensington lock feature
- troubleshoot the projector

Cleaning the Lens

Follow these steps to clean the projection lens:

1. Apply a non-abrasive camera lens cleaner to a soft, dry cloth.
   - Avoid using an excessive amount of cleaner.
   - Abrasive cleaners, solvents or other harsh chemicals might scratch the lens.
2. Lightly wipe the cleaning cloth over the lens in a circular motion.
3. If you don't intend to use the projector immediately, replace the lens cap.

Cleaning the Air Filters

The projector has two air filters, located on the bottom of the projector, that prevent dust and particles in the air from entering the projector. The larger filter is flexible mesh, the smaller one is rigid metal mesh.

If the filters becomes clogged, the projector does not cool properly and may malfunction. To prevent this, clean the filters after every 100 hours of use. Note that the filters are cleaned differently.

1. Turn off the power and unplug the power cord.

***NOTE**: Replacement filters are available from InFocus. See page page 40 for ordering information.*

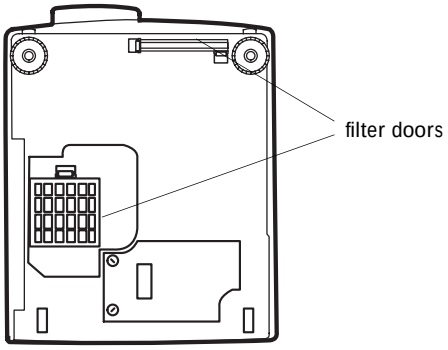

FIGURE 23

Filter doors

2 Turn the projector over and remove the larger filter door.

- Press the door's tab and lift out.

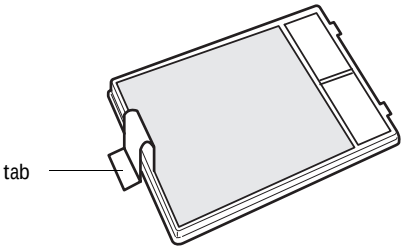

FIGURE 24

Removing the filter door

3 Remove the filter from the filter door.

4 Wash the filter.

- Use water with a mild detergent. Rinse thoroughly and let it dry completely

5 Place the filter on the door, then install the door into the projector.

6 Remove the smaller filter.

- Press the 2 tabs and pull the filter out.

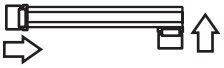

FIGURE 25

Removing the filter door

7 Use a vacuum cleaner to remove the dust from the filter, then reinstall the filter.

Replacing the Projection Lamp

The average life of the lamp is 2,000 hours. When the lamp has been in use for 1,500 hours, the lamp LED alternately blinks green and red. After 1,900 hours, the word "LAMP!" appears on the screen for one minute. After 2,000 hours, the lamp shuts off automatically. The projector cannot be used until you replace the lamp and reset the lamp timer. You can order new lamp modules from your InFocus dealer. See "Accessories" on page 40 for information.

WARNING: To avoid burns, allow the projector to cool for at least 60 minutes before you open the lamp module door. Never extract the lamp module while the lamp is operating.

Follow these steps to replace the projection lamp:

1 Turn off the projector and unplug the power cord.

2 Wait 60 minutes to allow the projector to cool thoroughly.

3 Invert the projector on a flat surface, then remove the lamp door by removing the 2 screws using a Phillips-head screwdriver (Figure 26).

CAUTION: Never operate the projector with the lamp door open or removed. This disrupts the air flow and causes the projector to overheat.

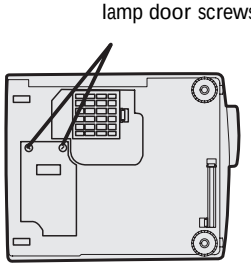

FIGURE 26

Removing the lamp door

4 Loosen the 2 screws adjacent to the metal handle on the lamp module (Figure 27).

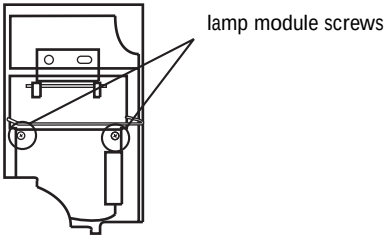

FIGURE 27

Removing the screws on the lamp module

5 Lift up the metal handle and pull the module out (Figure 28).

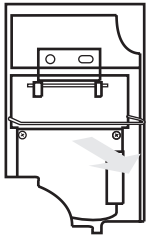

FIGURE 28

Removing the lamp module

WARNING: *Do not drop the lamp module or touch the glass bulb! The glass may shatter and cause injury.*

6 Install the new lamp module, being sure to align the connectors properly.

7 Tighten the screws on the outside of the module.

8 Replace the lamp door by sliding the tabs in one end and tightening the 2 screws on the other end.

9 Plug in the power cord and switch the projector back on, but do not press the **Power** button yet.

10 To reset the lamp hour counter, press and hold the left and right arrow buttons, then press the **Power** button (while still holding down the arrow buttons) for 5 seconds. To verify that the counter was reset, press and hold the up and down arrow buttons, then press the **Enter** button (while still holding down the arrow buttons). The Status menu appears. This read-only menu contains information such as the software version, lamp hours, and number of times the lamp hour counter has been reset. Press the **Enter** button to remove this menu.

Replacing the Batteries in the Remote Control

The life of the batteries depends on how often and how long you use the remote. Symptoms of low battery charge include erratic responses when using the remote and a reduced range of operation.

Follow these steps to replace the batteries:

1. Turn the remote face down in your hand.
2. Slide the battery cover off the end of the remote.
3. Remove the old batteries and dispose of them in an environmentally proper manner.
4. Install two new AA alkaline batteries. Make sure you install each in the correct direction.
5. Slide the battery cover back on the remote.

Using the Kensington Lock

The projector has a Kensington Security Standard connector for use with a Kensington MicroSaver Security System. It is located on the side of the projector near the handle. See “Optional Accessories” on page 41 for ordering information. Refer to the information that came with the Kensington System for instructions on how to use it to secure the projector.

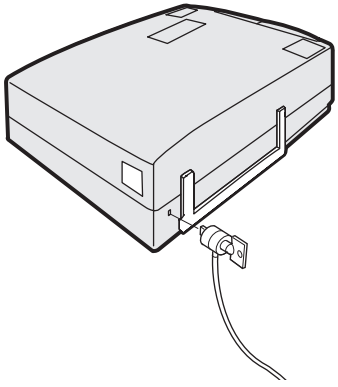

FIGURE 29

Connecting the Kensington Lock

Troubleshooting

LED indicators

POWER	LAMP	TEMP	CONDITION	POSSIBLE SOLUTIONS
Steady green	Steady green	Blinking green	Unusual temperature The ventilation openings or air filters are clogged with dust or debris.	Remove the obstruction or clean the filters.
Steady red	Off	Steady red	The room temperature is too high.	Relocate the projector to a cooler place.
Steady green	Blinking green/red	Off	Lamp life warning. Lights when the lamp has been in use for 1500 hours and the Power is on.	Replace the lamp.
Steady red	Blinking red	Off	Lamp life warning. Lights when the lamp has been in use for 1500 hours and the Power is off.	
Steady red	Steady red	Off	Lamp life warning. Lights when the lamp has been in use for 2,000 hours.	
Blinking green/red	Off	Off	The lamp or filter cover is not installed properly.	Re-install the cover correctly.
Blinking green/red	Steady or Blinking	Steady or Blinking	Error condition	Contact your dealer or InFocus.

NOTE: *If you accidentally use the Main power switch to turn the projector off while the lamp is on or still cooling, allow the projector to cool for 10 minutes before attempting to turn it back on.*

Problem: Nothing on projection screen

- Make sure that the power cord is properly connected to a fully functional AC electrical outlet. Make sure that the power cord is also properly connected to the projector.
- If the projector is plugged into a power strip, make sure the power strip is turned on.
- Make sure you have removed the lens cap on the projection lens at the front of the projector.
- Make sure the lamp is turned on. Press the **Power** button on the keypad.
- Check the projector's lamp to ensure that it had not been in use for over 2,000 hours and is securely connected in the lamp module. See "Replacing the Projection Lamp" on page 31.
- Make sure the lamp door and filter covers are correctly installed.
- Make sure you have allowed the projector to cool down before turning it off. If the lamp has not cooled sufficiently, you can not turn the projector back on immediately. Wait 10 minutes for the projector to cool, then turn it on.
- Make sure that the cables do not have any bent pins.
- Make sure the image and audio have not been muted.

Problem: Color or text not being projected

- You might need to adjust the brightness up or down until the text is visible. Refer to “Brightness” on page 21 for more information.

Problem: The screen resolution is not right

- Make sure the computer’s video card is set for a resolution of no greater than 1024x768.

Problem: Image isn’t centered on the screen

- Move the projector to reposition the image.
- Reposition the image using the software. Refer to “Horizontal Position” on page 27 and “Vertical Position” on page 27.
- Be sure the projector is at a 90 degree angle to the screen.

Problem: Only a blank screen displays

- Verify that the cables are connected correctly. See page 7 through page 11 for connection procedures.
- Verify that the proper input source is connected.
- You might need to turn everything off and power up the equipment again in the proper order. Refer to your computer’s documentation to determine the correct order.
- Make sure your laptop’s external video port is turned on. See the “Portable and Laptop Activation Chart” on page 42 or your computer’s manual for details.
- Make sure your computer’s video board is installed and configured correctly.
- Make sure your computer has a compatible video board. The projector isn’t CGA, EGA or SXGA compatible.

If you’re using Windows 98:

1. Open “My Computer” icon, the Control Panel folder and then the Display icon.
2. Click the Settings tab.
3. Verify that the Desktop area is set to 1024x768 or less.

Problem: Image is too wide or narrow for screen

- Adjust the zoom or projector placement.
- Adjust the resolution of your video card if it's greater than 1280x1024.

Problem: Image is out of focus

- Use the **Focus/Zoom** button to focus the image.
- Make sure the projection screen is at least 5 feet (1.5 m) from the projector.
- Check the projection lens to see if it needs cleaning.

Problem: Image and menus are reversed left to right

- Rear projection mode is probably selected. Turn Image Reverse off in the Installation menu. The image should immediately return to forward projection. See "Image Reverse" on page 24

Problem: the projector displays vertical lines, "bleeding" or spots

- Adjust the brightness. See "Brightness" on page 21
- Check the projection lens to see if it needs cleaning.

Problem: no sound

- Adjust volume.
- Verify audio/input connections.
- Adjust audio source.
- Make sure Mute is not active.

Problem: Image is "noisy" or streaked

Try these steps in this order.

1. Deactivate the screen saver on your computer.
2. Adjust the synchronization and tracking manually to find an optimal setting. See "Fine Sync" on page 27 and "Tracking" on page 28.

- The problem could be with your computer's video card. If possible, connect a different computer.

Problem: Projected colors don't match the computer or video player's colors

- Just as there are differences in the displays of different monitors, there are often differences between the computer image and the projected image. Adjust the brightness, tint and / or contrast from the Picture menu. See "Brightness" on page 21, "Color" on page 22 and "Contrast" on page 21.

Problem: Lamp seems to be getting dimmer

- The lamp begins to lose brightness when it has been in use for a long time. Replace the lamp as described in "Replacing the Projection Lamp" on page 31.

Problem: Lamp shuts off

- A minor power surge may cause the lamp to shut off. Unplug the projector, wait at least 10 minutes, then plug it back in.
- Make sure the vents are not blocked.

The most current troubleshooting information can be found in the Service and Support section of our website at **http://www.infocus.com/service.**

Before calling your dealer or InFocus Technical Support for assistance, please have the following information available:

- the projector's serial number (located on the bottom label)
- the resolution of your computer.

Call InFocus Technical Support at **1-800-799-9911** between 6 a.m. and 6 p.m. PST, Monday through Friday. Support is available in North America after hours and on weekends for a fee at **1-888-592-6800**.

In Europe, call InFocus in The Netherlands at **(31) 35-6474010** between 8 a.m. and 6 p.m. Central European Time. Support is available in Europe after hours and on weekends for a fee at (**31) 35-6474001**.

In Asia, call **(65) 332-0659** between 9:30 a.m. and 5:30 p.m.

Or, send us an e-mail at **techsupport@infocus.com**

APPENDIX

Specifications

The LP770 must be operated and stored within the temperature and humidity ranges specified.

Temperature	
Operating	41 to 104° F (5 to 40° C) at sea level 95° F (354° C) maximum at 9,000 feet

Humidity	
Operating and non-oper.	30% to 90% relative humidity, non-condensing

Dimensions
15 x 11.8 x 5.6 inches (38.1 x 30 x 14.2 cm)

Weight
13 lbs. (6.0 kg) unpacked

Altitude	
Operating	0 to 9,000 feet (2,743 meters)
Non-operating	0 to 40,000 feet (12,192 meters)

Optics	
Focus Range	5.1 - 33 feet (1.5-10 m)

Lamp	
Type	190-watt NSH lamp

Input Power Requirements
100-240VAC 2.9A;50/60Hz

Accessories

Standard Accessories (ship with the projector)	Part Number
Quick Start card	009-0458-xx
User's Guide	010-0222-xx
Easy Carry Case	CA-C180
Shipping Box	110-0295-xx
VESA Computer Cable	210-0170-xx
Composite Video Cable	210-0167-xx
Audio Cable	210-0168-xx
USB Mouse Cable	210-0179-xx
RS-232 Cable	210-0183-xx
PS/2 adapter	210-0050-xx
Remote	590-0308-xx
Remote Cable	210-0178-xx
Projection Lamp Module	SP-LAMP-LP770
Lens Cap	340-0627-xx
Filter-bottom intake	321-0149-xx
Filter-front intake	321-0150-xx

NOTE: *Use only InFocus-approved accessories. Other products have not been tested with the projector.*

Power Cords (one ships with projector, type depends on country)

North American Power Cord	210-0023-xx
Australian Power Cord	210-0027-xx
UK Power Cord	210-0028-xx
European Power Cord	210-0029-xx
Danish Power Cord	210-0030-xx
Swiss Power Cord	210-0031-xx

Optional Accessories

LP770 Deluxe Carry Case	CA-C180
LP770 Shipping Case (ATA approved)	CA-C184
LP770 Deluxe Travel Case	CA-C182
Macintosh Adaptor	SP-MACADPT
GyroPoint II Radio Frequency Remote	HW-RF-REM
IR Remote Receiver	HW-EXRCVR
Kensington MicroSaver Security System	SP-KENLOC
S-Video Cable	515-0027-xx
LP770 Ceiling Mount-LiteMount	SP-CEIL-LM770
LiteMount False Ceiling Plate	SP-LTMT-PLT
LiteMount Pipe Tubing Extension	SP-LTMT-EXT
50” VGA Extension Cable and Amplifier	591-0131-xx
Portable Projector Stand	SP-STND
40” Portable Projector Screen	HW-PORTSCR40
50” Portable Projector Screen	HW-PORTSCR50
60” Deluxe InstaTheatre Screen	HW-DLXSCRN
3rd Year Advantage Service Plan (1 year extension)	EW-LP77x-12

NOTE: *You can purchase these items by contacting your dealer or InFocus Catalog Sales at 1-800-660-0024.*

NOTE: *Visit our website at www.infocus.com for the most current activation chart. It is located in the Technical Library.*

NOTE: *Often, pressing the key commands once activates the external video port, pressing it again activates both the external and internal ports, and pressing it a third time activates the internal port. Refer to your computer's documentation for details on your specific model.*

Portable and Laptop Activation Chart

Many laptop computers do not automatically turn on their external video port when a projector is connected. Activation commands for some laptop computers are listed in the following table. (If your computer is not listed or the given command does not work, refer to the computer's documentation for the appropriate command.) On many laptops, the activation function key is labeled with an icon, for example or the text CRT/LCD.

Computer	Key command to activate port	Key command to de-activate port
Acer	Ctrl-Alt-Esc (for setup)	Ctrl-Alt-Esc (for setup)
AST* **	FN-D or Ctrl-D	FN-D or Ctrl-D
	Ctrl-FN-D	Ctrl-FN-D
	FN-F5	FN-F5
	type from A:/IVGA/CRT	type from A:/IVGA/CRT
	FN-F12	FN-F12
Advanced Logic Research	Ctrl-Alt-V	Ctrl-Alt-V
Altima	Shift-Ctrl-Alt-C	Shift-Ctrl-Alt-L
	setup VGA/ Conf.Simulscan	setup VGA/ Conf.Simulscan
Ambra**	FN-F12	FN-F12
	FN-F5	FN-F5
	F2/Choose Option/F5	F2/Choose Option/F5
Amrel* **	setup menu	setup menu
	Shift-Ctrl-D	Shift-Ctrl-D
Apple	see Mac Portable and Mac PowerBook	
Aspen	automatic	automatic
BCC*	automatic	reboot computer
Bondwell	LCD or CRT options after bootup	reboot for LCD or CRT options to appear
Chaplet**	setup screen	setup screen
	FN-F6	FN-F6
	FN-F4	FN-F4
Commax	Ctrl-Alt-#6	Ctrl-Alt-#5

Computer	Key command to activate port	Key command to de-activate port
Compaq* **	Ctrl-Alt-<	Ctrl-Alt->
	FN-F4	FN-F4
	automatic	automatic
	mode/? (for setup option)	mode/? (for setup option)
Compuadd* **	automatic	automatic
	Alt-F for screen setup option	Alt-F for screen setup option
Data General	Ctrl-Alt-Command	Ctrl-Alt-Command
Data General Walkabout	2 CRT/X at DOS prompt	reboot
Datavue	Ctrl-Shift-M	Ctrl-Shift-M
Dell**	Ctrl-Alt-<	Ctrl-Alt->
	Ctrl-Alt-F10	Ctrl-Alt-F10
	FN-F8 (CRT/LCD)	FN-F8
	FN-D	FN-D
	FN-F12	FN-F12
Digital*	automatic	reboot
	FN-F2	FN-F2
Dolch	dip switch to CRT	dip switch to LCD
Epson	dip switch to CRT	dip switch to LCD
Everex*	setup screen option	setup screen option
For-A	Ctrl-Alt-Shift-C	Ctrl-Shift-Alt-L
Gateway	FN-F1/FN-F1 again simultaneous	FN-F1
Grid* **	FN-F2, choose auto or simultaneous	FN-F2
	Ctrl-Alt-Tab	Ctrl-Alt-Tab
Hyundai	setup screen option	setup screen option
IBM 970*	automatic	warm reboot

Computer	Key command to activate port	Key command to de-activate port
IBM ThinkPad**	reboot, enter setup menu	FN-F2
	FN-F7, select choice from setup menu	
	FN-F1, select choice	
	FN-F5, select choice	
	PS/2 SC select choice (CRT, LCD, etc.)	
Kaypro	boot up, monitor plugged in	unplug monitor
Kris Tech	FN-F8	FN-F8
Mac Portable 100	no video port: not compatible	
Mac PowerBook		
140, 145, 150, 170	no video port: requires a 3rd-party interface	
160, 165, 180, 520, 540, 5300	Control Panel folder, PowerBook Display folder; Activate Video Mirroring	warm reboot
210, 230, 250, 270, 280, 2300	requires Apple Docking Station or Mini Dock	
Magitronic	FN-F4	FN-F4
Mastersport	FN-F2	FN-F1
Micro Express*	automatic	warm reboot
Microslate*	automatic	warm reboot
Mitsubishi	SW2 On-Off-Off-Off	SW2 Off-On-On-On
NCR	setup screen option	setup screen option
NEC* **	setup screen option	setup screen option
	CRT at the DOS prompt	LCD at the DOS prompt
	FN-F31	FN-F3
Olivetti*	automatic	automatic
	FN-O/*	FN-O/*
	FN- | |	FN- | |

Computer	Key command to activate port	Key command to de-activate port
Packard Bell**	FN-F2	FN-F2
	Ctrl-Alt-<	Ctrl-Alt->
Panasonic	FN-F2	FN-F2
Samsung*	setup screen option	setup screen option
Sanyo	setup screen option	setup screen option
Sharp	dip switch to CRT	dip switch to LCD
Sun SPARC-Dataview	Ctrl-Shift-M	Ctrl-Shift-M
Tandy**	Ctrl-Alt-Insert	Ctrl-Alt-Insert
	setup screen option	setup screen option
Texas Instruments*	setup screen option	setup screen option
Top-Link* **	setup screen option	setup screen option
	FN-F6	FN-F6
Toshiba* **	Ctrl-Alt-End	Ctrl-Alt-Home
	FN-End	FN-Home
	FN-F5	FN-F5
	setup screen option	setup screen option
Twinhead*	FN-F7	FN-F7
	FN-F5	FN-F5
	Automatic	Automatic
WinBook	Ctrl-Alt-F10	Ctrl-Alt-F10
Wyse	software driven	software driven
Zenith**	FN-F10	FN-F10
	FN-F2	FN-F2
	FN-F1	FN-F1

* These manufacturers have models that automatically send video to the external CRT port when some type of display device is attached.

** These manufacturers offer more than one key command depending on the computer model.

Using Video Mirroring with a PowerBook Computer

When you turn video mirroring (called SimulScan in newer PowerBooks—see below) on, the projector displays the same information that appears on your PowerBook's built-in screen. When video mirroring is off, the projector acts like a separate display.

To turn on video mirroring for the first time:

1. Open the Monitors control panel; click on Monitor 2.
2. Set the number of colors you want.
3. Open the Control Strip, then click on the monitor icon.
4. Select "Turn Video Mirroring On."

Now you can turn video mirroring on and off from the Control Strip without having to open the Monitors control panel again.

When using video mirroring and high color graphics such as slide shows, the projected image occasionally might turn black and white. If this happens, perform the following steps:

1. Turn off video mirroring.
2. Open the Monitors control panel.
3. Move the white menu bar to Monitor 2 to set the projector as the primary monitor.
4. Restart the PowerBook.

Using SimulScan

Some newer PowerBooks display images on an external monitor or projector differently than previous ones. When using SimulScan, the projector displays the same information that appears on your PowerBook

To select SimulScan:

1. Open the Control Panel, then double-click Monitors and Sound.
2. In the Resolution list, choose the SimulScan mode, then click OK.
3. If this changes your display settings, a dialog box appears. Click OK to confirm the change.

Projected Image Size

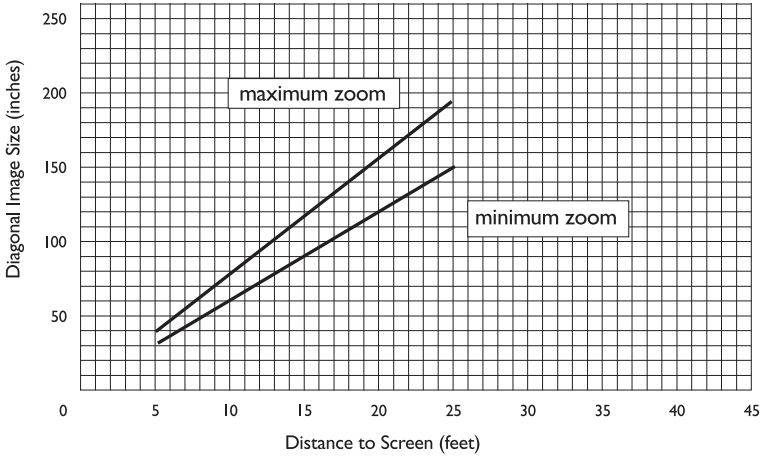

FIGURE 30

Projected image size

NOTE: *Use the graph and tables to help you determine projected image sizes.*

NOTE: *Visit our website at www.infocus.com for an interactive image size calculator. It is located in the Technical Library in the Service and Support section.*

Table 1:
Image Size, Width and Height for LP770-maximum zoom

Diagonal (inches)	Height (inches)	Width (inches)	Distance to Screen (inches)
40	24	32	61
60	36	48	92
100	60	80	155
140	84	112	218
180	108	144	281

Table 2:
Image Size, Width and Height for LP770-minimum zoom

Diagonal (inches)	Height (inches)	Width (inches)	Distance to Screen (inches)
40	24	32	77
60	36	48	116
100	60	80	195
140	84	112	274
180	108	144	353

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